Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P639963

Luminaire Tested: GWS-SA5C-830-U-SL4-W

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P639963
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5C-830-U-SL4-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	18167.1 lumens
Efficiency:	N/A
Efficacy:	115.3 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G3

Input Watts (W):	157.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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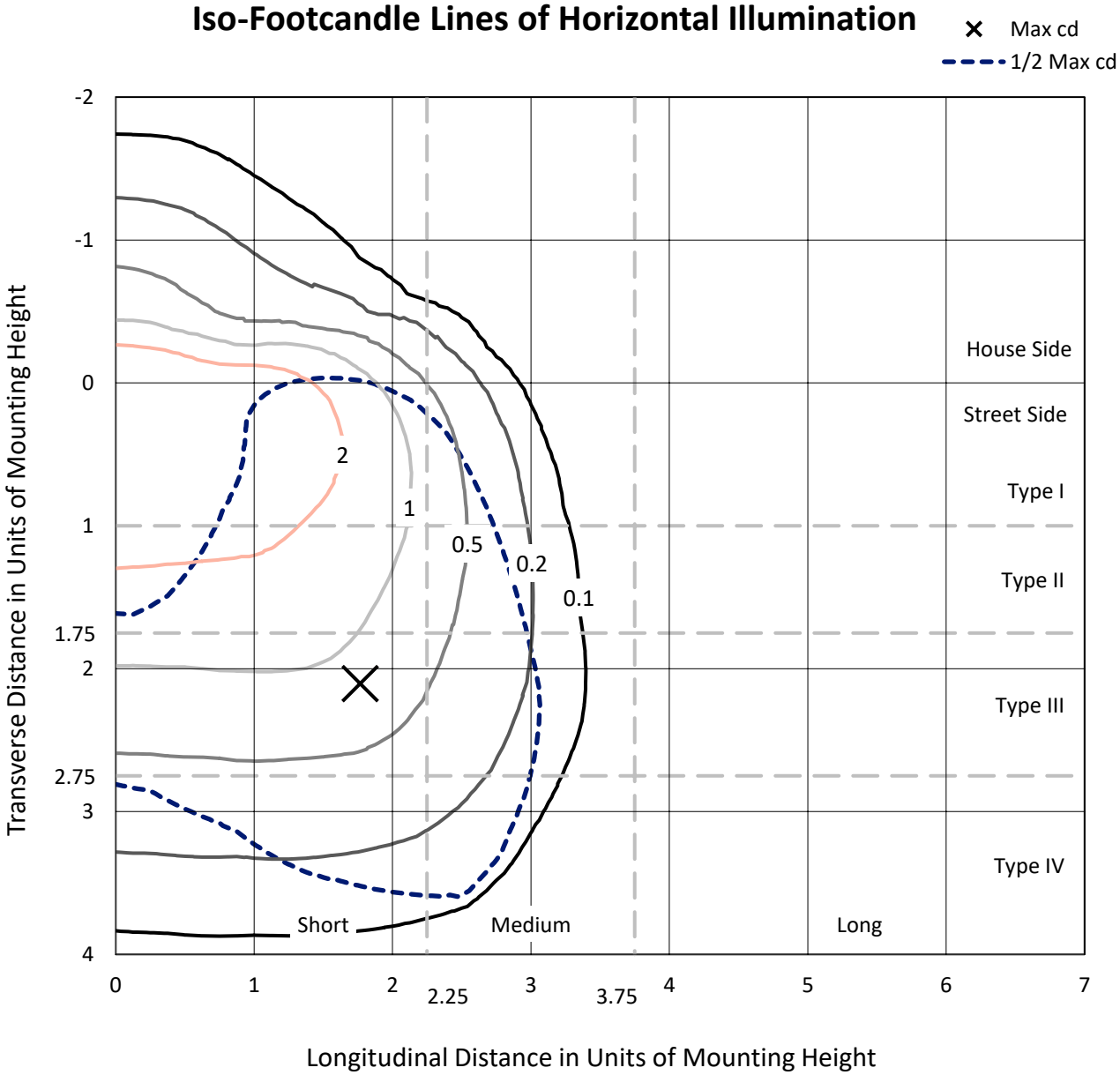
Scaled Data Report

REPORT NUMBER: P639963
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
Type IV - Short - N/A

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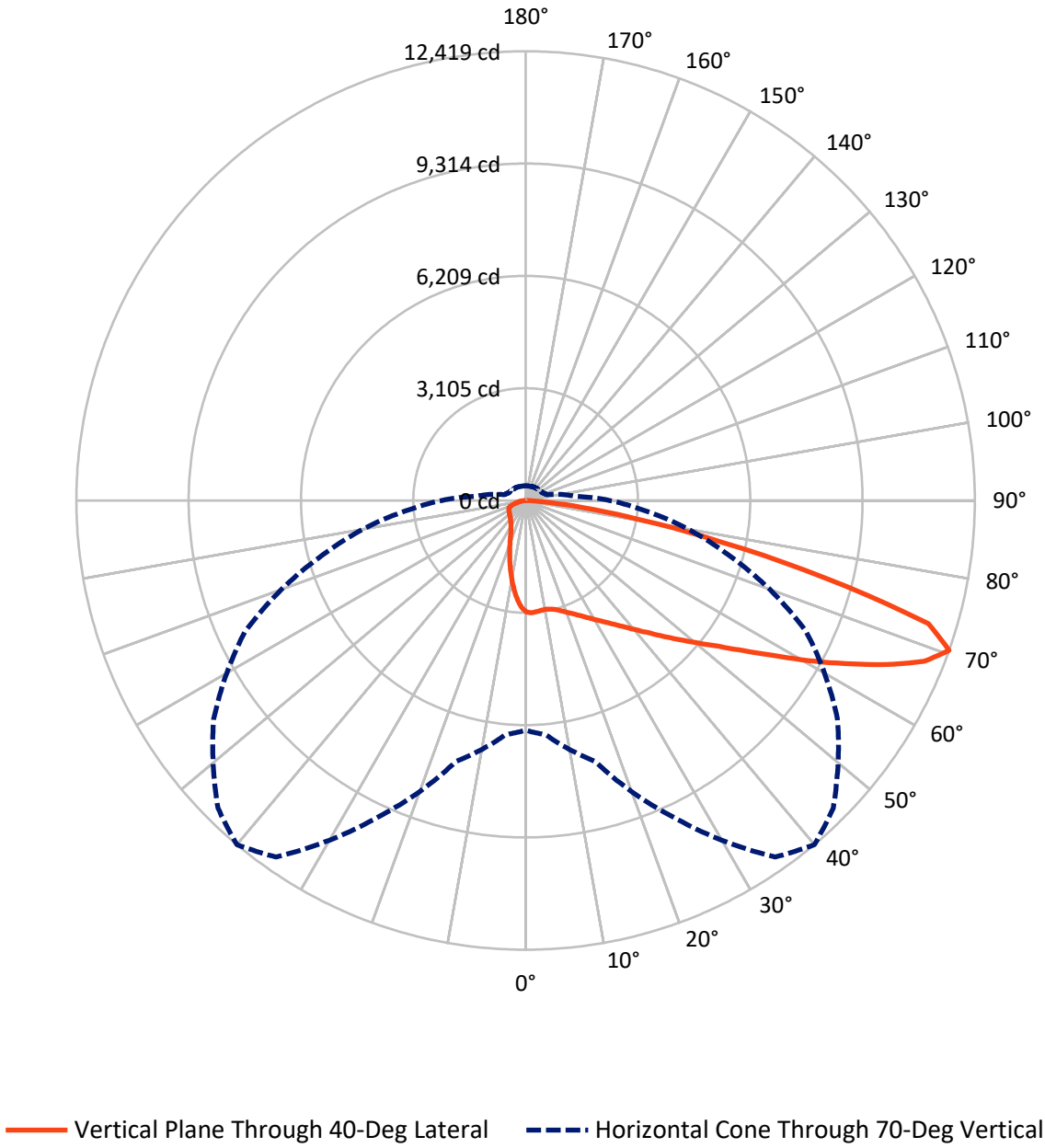
Luminous Intensity Polar Plot



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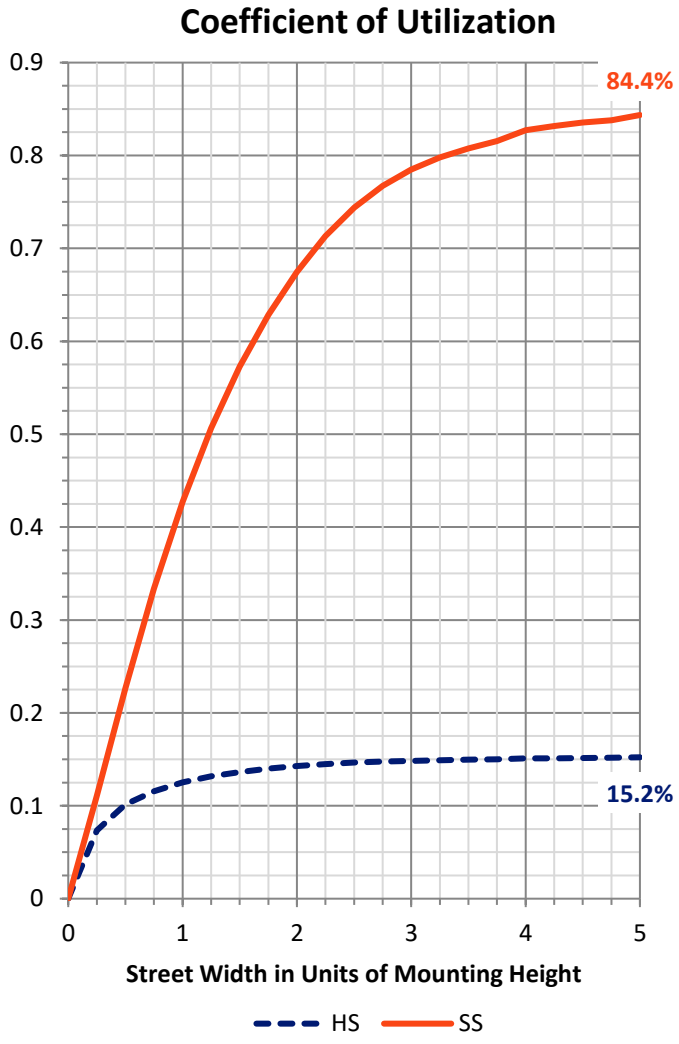
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2798.2	0.0	2798.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	15368.9	0.0	15368.9
	% Fixture	84.6	0.0	84.6
Total	Lumens	18167.1	0.0	18167.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.5	1.5
10°-20°	710.4	3.9
20°-30°	1115.4	6.1
30°-40°	1677.1	9.2
40°-50°	2588.6	14.2
50°-60°	3844.3	21.2
60°-70°	4845.6	26.7
70°-80°	2802.2	15.4
80°-90°	311.0	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	18167.1	100.0
0°-180°	18167.1	100.0



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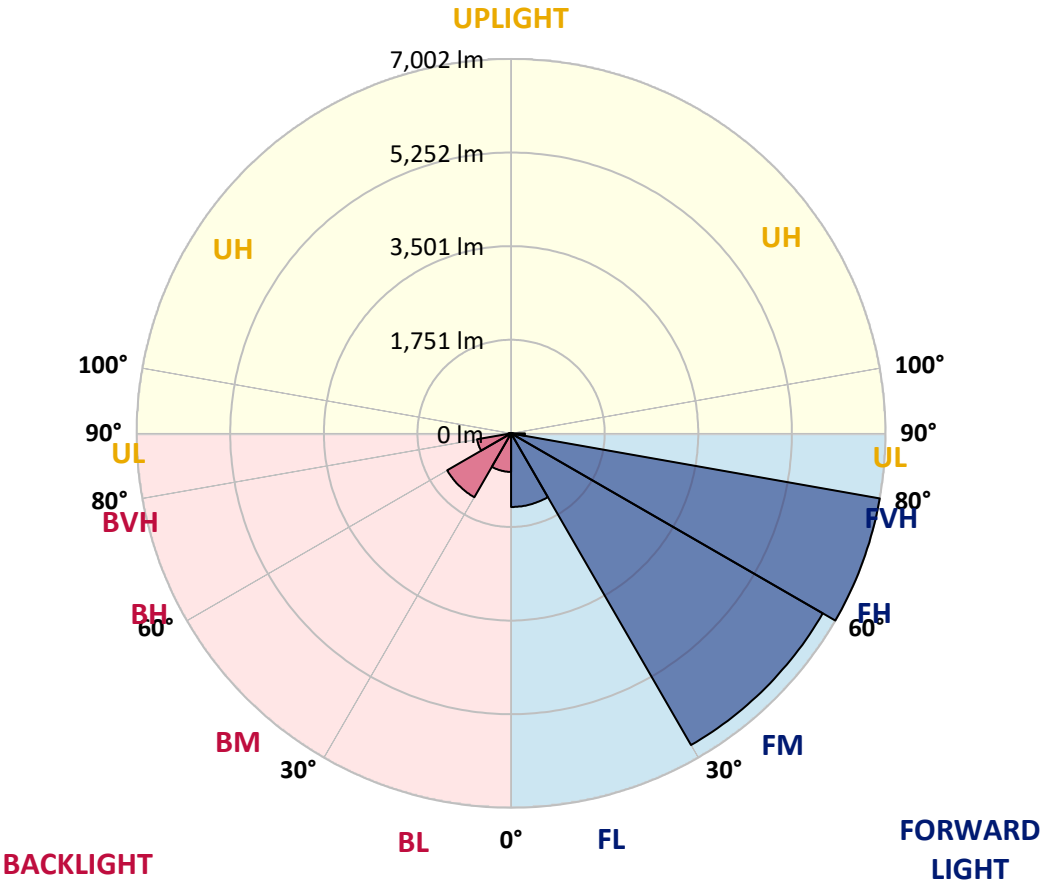
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1377.2	7.6			
FM	(30°-60°)	6730.7	37.0			
FH	(60°-80°)	7002.0	38.5			G3/7500
FVH	(80°-90°)	259.0	1.4			G3/500
BL	(0°-30°)	721.1	4.0	B2/1000		
BM	(30°-60°)	1379.3	7.6	B2/2500		
BH	(60°-80°)	645.8	3.6	B2/1000		G2/1000
BVH	(80°-90°)	52.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type IV Short



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REPORT NUMBER: P639963
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0
2.5°	3104.0	3109.4	3113.5	3118.9	3116.2	3108.0	3114.8	3114.8	3099.9	3083.6	3068.7
5°	3108.0	3114.8	3113.5	3112.1	3101.3	3087.7	3087.7	3079.6	3053.8	3028.0	3003.6
7.5°	3099.9	3098.5	3097.2	3093.1	3080.9	3066.0	3063.3	3047.0	3013.1	2977.9	2942.6
10°	3063.3	3061.9	3066.0	3075.5	3072.8	3059.2	3059.2	3044.3	3005.0	2961.6	2915.5
12.5°	3033.5	3033.5	3049.7	3075.5	3085.0	3079.6	3080.9	3070.1	3025.3	2973.8	2919.5
15°	3037.5	3038.9	3074.1	3116.2	3133.8	3129.7	3131.1	3118.9	3068.7	3017.2	2944.0
17.5°	3064.6	3071.4	3132.4	3190.8	3213.8	3208.4	3198.9	3178.5	3121.6	3063.3	2973.8
20°	3121.6	3132.4	3211.1	3284.3	3311.4	3299.2	3283.0	3242.3	3179.9	3116.2	3006.3
22.5°	3234.1	3240.9	3327.7	3399.6	3421.3	3406.4	3373.8	3315.5	3243.6	3177.2	3045.7
25°	3392.8	3400.9	3483.7	3550.1	3544.7	3527.0	3482.3	3410.4	3325.0	3254.5	3102.6
27.5°	3581.3	3594.9	3676.2	3729.1	3693.8	3668.1	3617.9	3531.1	3434.8	3371.1	3189.4
30°	3787.4	3792.8	3862.0	3914.9	3860.6	3825.4	3764.4	3670.8	3584.0	3536.5	3319.6
32.5°	3986.7	3992.2	4051.8	4081.7	4024.7	3999.0	3946.1	3847.1	3786.1	3760.3	3513.5
35°	4196.9	4195.6	4244.4	4270.2	4211.8	4201.0	4146.8	4070.8	4060.0	4093.9	3796.9
37.5°	4407.1	4394.9	4420.7	4454.6	4422.0	4432.9	4397.6	4371.9	4413.9	4502.0	4173.9
40°	4575.3	4575.3	4602.4	4644.4	4655.3	4702.7	4682.4	4716.3	4851.9	5062.1	4640.4
42.5°	4724.4	4725.8	4782.7	4847.8	4926.5	4999.7	5016.0	5104.1	5384.8	5714.3	5226.2
45°	4880.4	4881.7	4959.0	5053.9	5220.7	5360.4	5393.0	5590.9	5992.3	6393.7	5862.1
47.5°	5060.7	5045.8	5152.9	5311.6	5548.9	5749.6	5833.7	6114.4	6621.5	7115.1	6461.5
50°	5264.1	5232.9	5352.3	5626.2	5919.1	6194.4	6335.4	6656.8	7296.8	7780.9	7025.6
52.5°	5493.3	5475.7	5600.4	5934.0	6381.5	6698.8	6890.0	7311.7	7953.2	8444.0	7473.1
55°	5778.1	5736.0	5916.4	6340.8	6923.9	7328.0	7554.5	7959.9	8670.5	9046.1	7814.8
57.5°	6090.0	6043.9	6285.2	6849.3	7629.1	8072.5	8355.9	8689.5	9345.8	9507.2	8015.5
60°	6426.3	6411.3	6697.5	7446.0	8469.8	8985.1	9189.9	9492.3	9933.0	9774.3	7965.4
62.5°	6734.1	6728.7	7145.0	8092.8	9360.7	9927.5	10090.3	10170.3	10356.0	9756.7	7566.7
65°	7058.2	7104.3	7667.0	8842.7	10381.8	10937.8	11005.6	10802.2	10498.4	9294.3	6750.3
67.5°	7098.8	7188.3	7995.2	9545.1	11350.0	11874.8	11820.6	11042.2	10078.1	8007.4	5291.3
70°	6349.0	6504.9	7471.8	9652.3	12032.1	12418.6	12026.7	10525.6	8552.5	5801.1	3327.7
72.5°	5304.8	5439.1	6293.4	8231.1	11152.0	11644.3	11114.1	8909.2	6043.9	3327.7	1695.0
75°	4129.1	4285.1	5072.9	6542.9	8349.1	8545.7	8280.0	6213.4	3322.3	1372.3	770.2
77.5°	2519.5	2632.1	3245.0	4432.9	5841.8	5547.5	4701.4	3483.7	1457.7	657.7	476.0
80°	1114.7	1183.8	1598.8	2381.2	3375.2	3190.8	2515.4	1487.6	797.3	417.7	332.2
82.5°	598.0	642.8	787.9	942.4	1482.1	1549.9	1257.0	857.0	428.5	238.7	189.8
85°	263.1	288.8	358.0	341.7	486.8	478.7	482.7	588.5	204.8	109.8	123.4
87.5°	0.0	0.0	0.0	0.0	1.4	1.4	14.9	78.7	20.3	32.5	28.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report

REPORT NUMBER: P639963
CATALOG NUMBER: GWS-SA5C-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0	3085.0
2.5°	3052.4	3028.0	3021.2	3013.1	2998.2	2972.4	2953.4	2931.7	2922.3	2911.4	2912.8
5°	2976.5	2946.7	2918.2	2881.6	2835.5	2783.9	2748.7	2708.0	2686.3	2666.0	2671.4
7.5°	2911.4	2865.3	2807.0	2729.7	2647.0	2554.8	2480.2	2421.9	2382.6	2355.4	2369.0
10°	2870.7	2816.5	2714.8	2588.7	2449.0	2308.0	2200.8	2100.5	2038.1	1989.3	1986.6
12.5°	2862.6	2792.1	2644.3	2461.2	2259.2	2070.7	1913.4	1777.8	1695.0	1634.0	1657.1
15°	2870.7	2781.2	2583.2	2343.2	2088.3	1833.4	1638.1	1482.1	1383.2	1327.6	1323.5
17.5°	2880.2	2770.4	2514.1	2215.8	1909.3	1617.8	1391.3	1225.9	1124.2	1068.6	1069.9
20°	2888.4	2754.1	2432.7	2076.1	1727.6	1417.1	1182.5	1025.2	934.3	893.6	900.4
22.5°	2901.9	2737.8	2345.9	1926.9	1541.8	1223.1	1017.0	889.6	835.3	808.2	809.6
25°	2927.7	2728.3	2256.4	1764.2	1358.7	1068.6	903.1	817.7	783.8	767.5	766.2
27.5°	2980.6	2736.5	2162.9	1606.9	1193.3	950.6	829.9	774.3	751.2	740.4	739.0
30°	3068.7	2769.0	2081.5	1446.9	1050.9	858.4	779.7	745.8	732.3	722.8	721.4
32.5°	3203.0	2830.0	1993.4	1297.7	935.7	790.6	740.4	722.8	713.3	707.9	707.9
35°	3406.4	2941.2	1906.6	1167.5	846.2	737.7	709.2	702.4	694.3	691.6	694.3
37.5°	3699.3	3118.9	1827.9	1053.6	782.4	697.0	675.3	678.0	671.2	675.3	679.4
40°	4070.8	3356.2	1761.5	960.1	735.0	667.2	645.5	655.0	650.9	655.0	661.7
42.5°	4541.4	3650.4	1711.3	886.8	701.1	642.8	622.4	631.9	629.2	634.6	641.4
45°	5066.2	4038.3	1688.3	835.3	676.7	625.1	603.4	610.2	607.5	611.6	618.4
47.5°	5569.2	4390.8	1708.6	805.5	656.3	610.2	587.2	589.9	588.5	587.2	591.2
50°	6003.2	4671.5	1766.9	796.0	642.8	595.3	573.6	575.0	570.9	562.8	565.5
52.5°	6357.1	4896.6	1802.2	796.0	636.0	579.0	558.7	560.0	551.9	541.1	542.4
55°	6590.3	4987.5	1773.7	794.6	633.3	565.5	543.8	545.1	537.0	523.4	524.8
57.5°	6656.8	4899.4	1654.4	779.7	630.6	554.6	528.9	531.6	526.1	511.2	511.2
60°	6471.0	4576.6	1436.0	745.8	623.8	547.8	518.0	522.1	519.4	504.4	504.4
62.5°	5984.2	4003.0	1175.7	694.3	604.8	539.7	508.5	516.6	523.4	515.3	513.9
65°	5072.9	3207.0	956.0	637.3	580.4	526.1	495.0	515.3	530.2	541.1	541.1
67.5°	3806.4	2295.8	779.7	577.7	543.8	499.0	477.3	496.3	507.2	513.9	518.0
70°	*2320.2*	*1350.6*	*614.3*	*508.5*	*490.9*	*458.3*	*442.1*	*423.1*	*408.2*	*405.5*	*406.8*
72.5°	1135.0	772.9	499.0	432.6	419.0	389.2	352.6	344.4	337.7	333.6	332.2
75°	625.1	538.3	412.2	359.3	334.9	298.3	290.2	276.6	273.9	268.5	269.9
77.5°	442.1	424.4	340.4	291.5	254.9	236.0	240.0	230.5	230.5	226.5	225.1
80°	332.2	333.6	261.7	212.9	188.5	181.7	185.8	185.8	183.1	181.7	180.4
82.5°	210.2	237.3	176.3	137.0	134.2	135.6	134.2	132.9	135.6	131.5	130.2
85°	145.1	170.9	107.1	81.4	81.4	80.0	82.7	81.4	84.1	80.0	80.0
87.5°	32.5	75.9	39.3	24.4	25.8	24.4	25.8	27.1	29.8	31.2	31.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

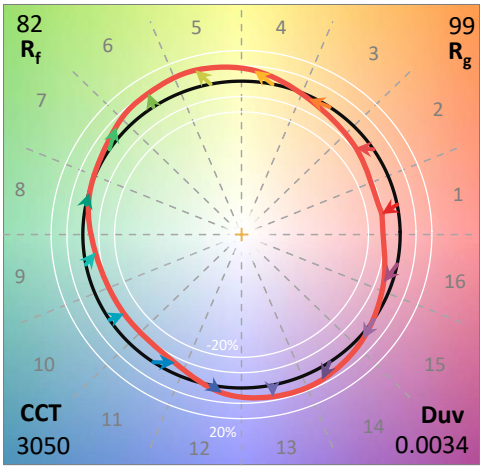
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

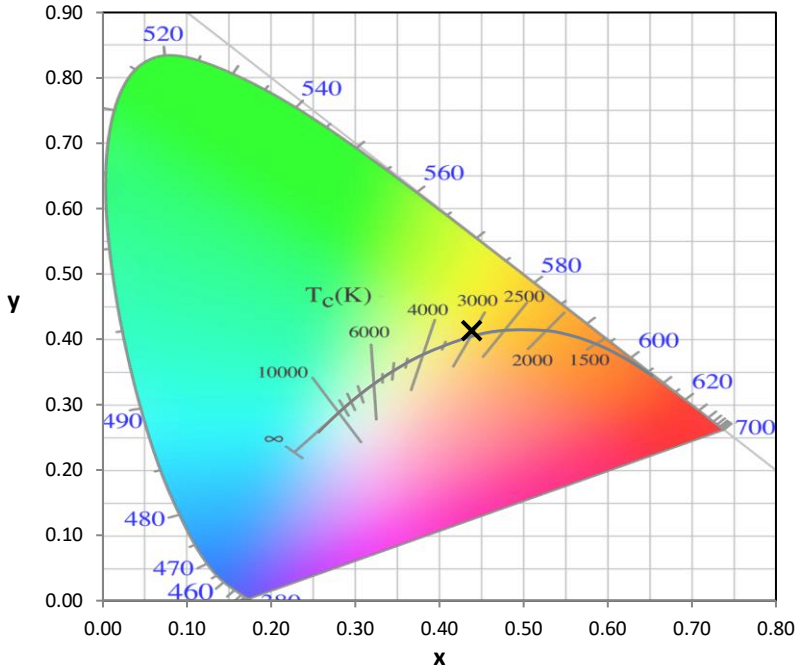
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

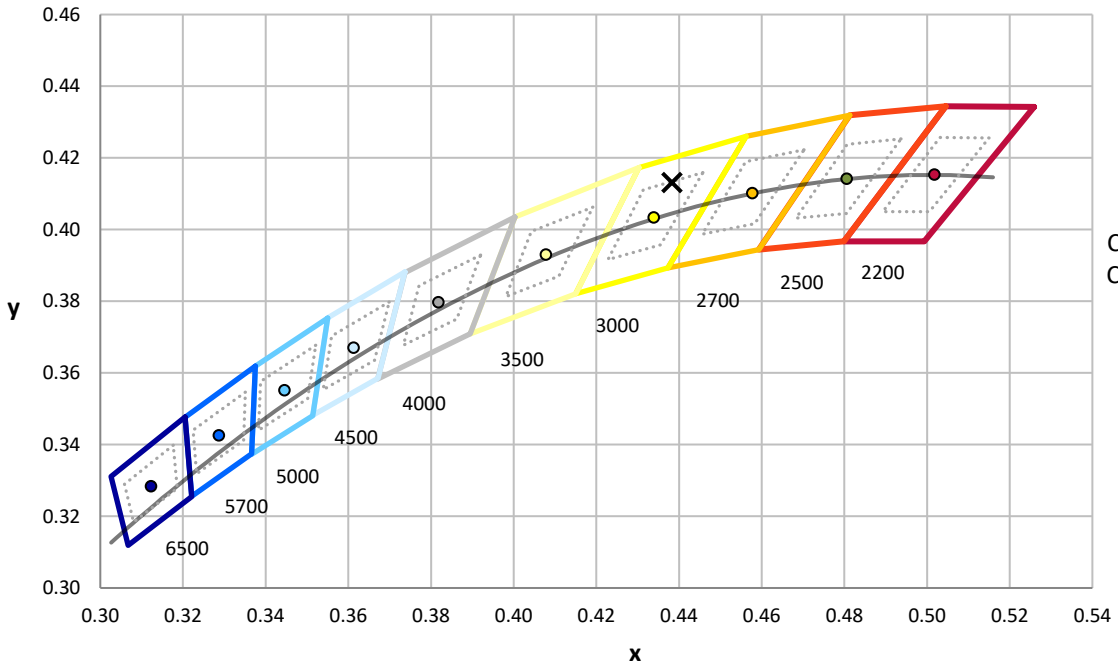
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

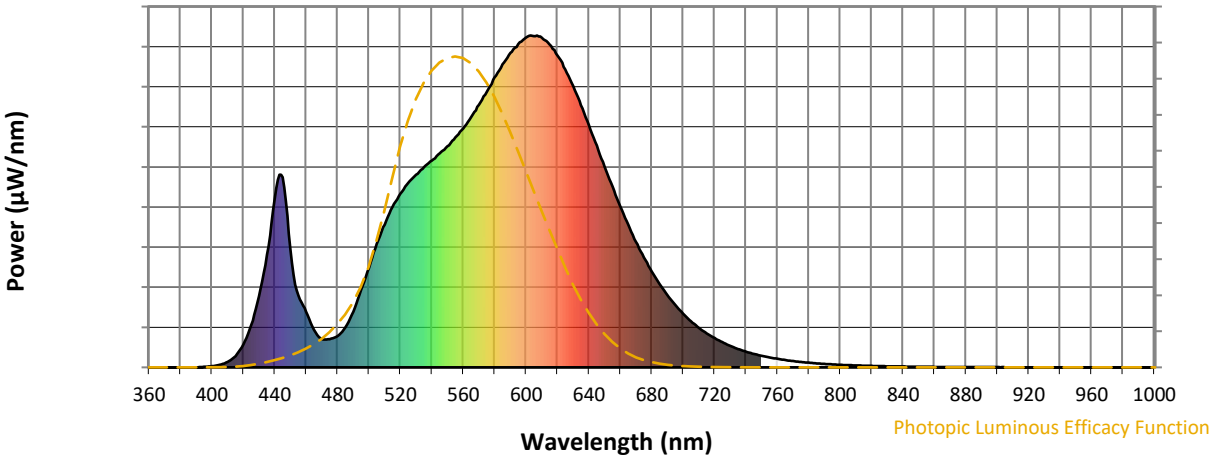


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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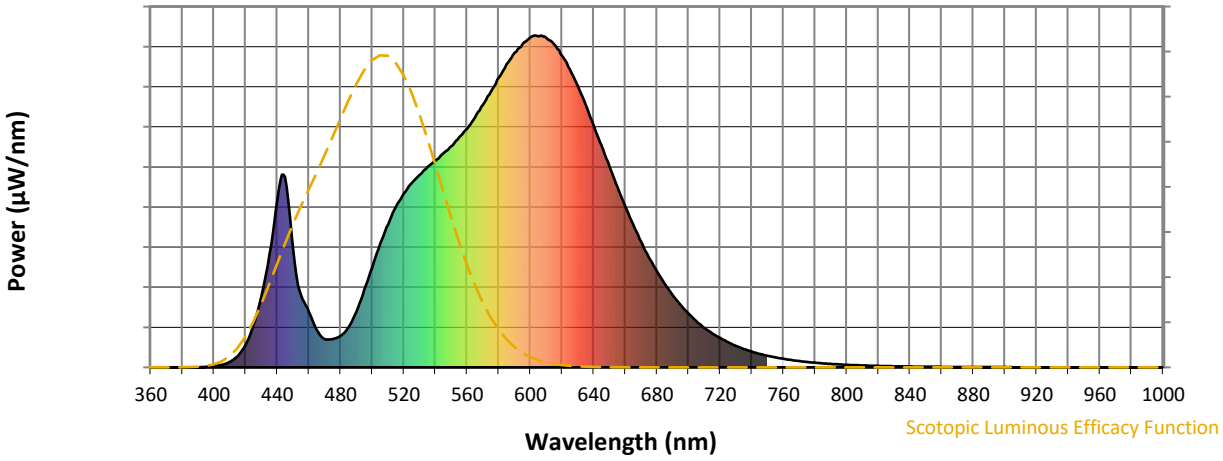
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.27**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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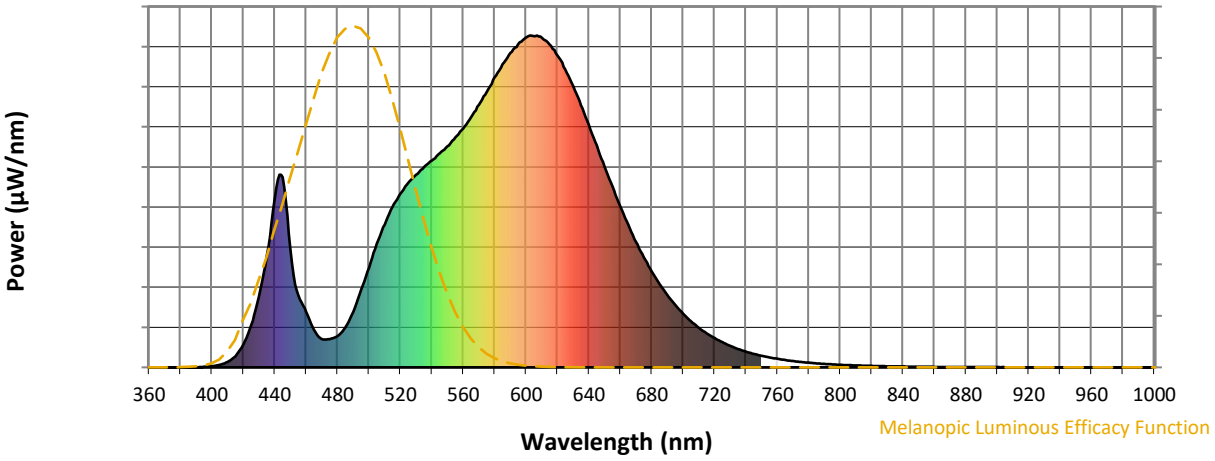
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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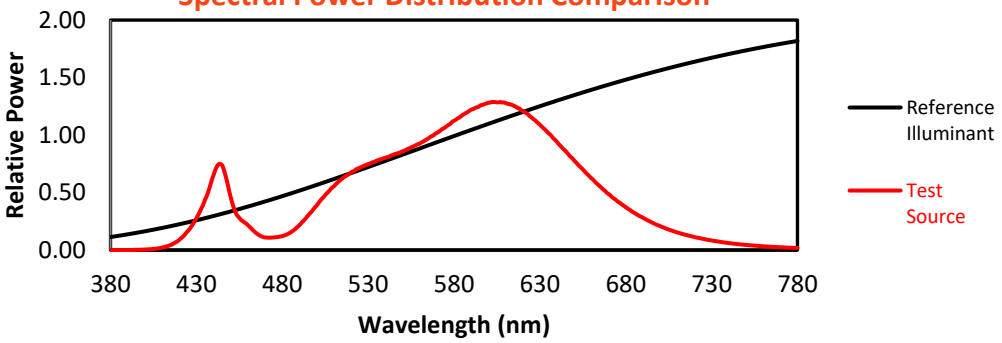
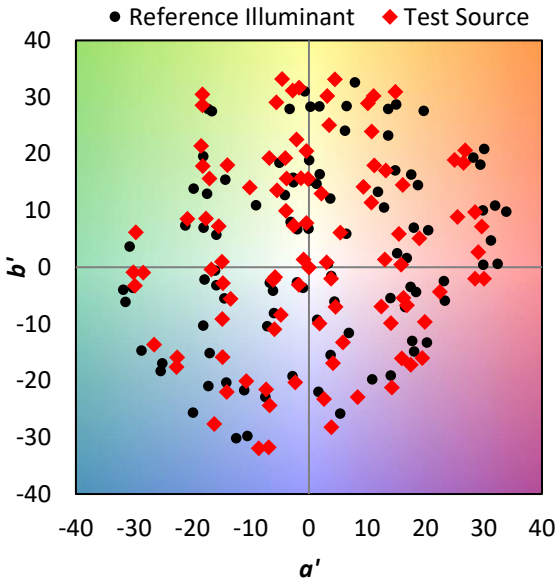
Summary

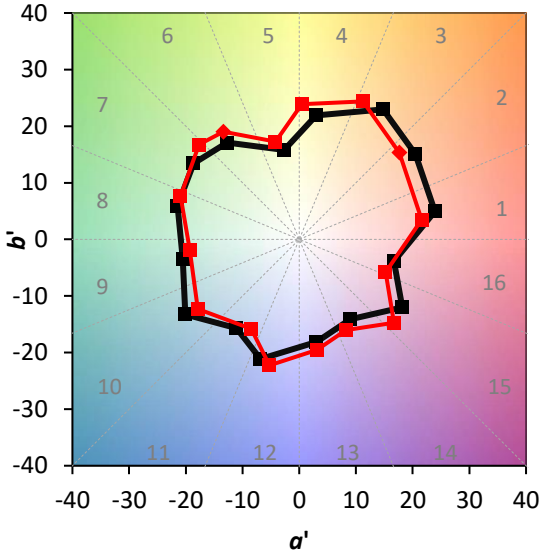
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

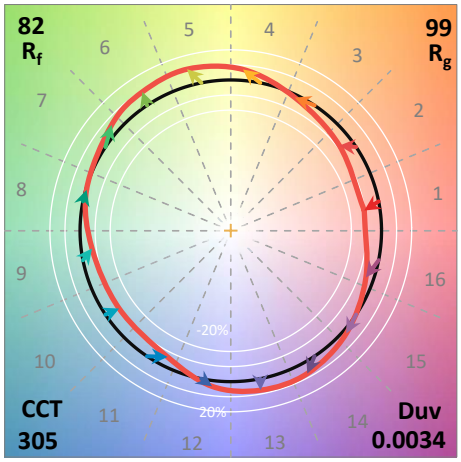
Spectral Power Distribution Comparison

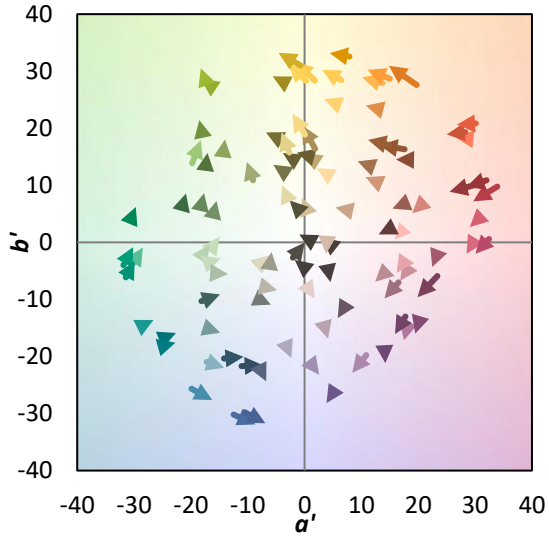


Color Vector Graphics









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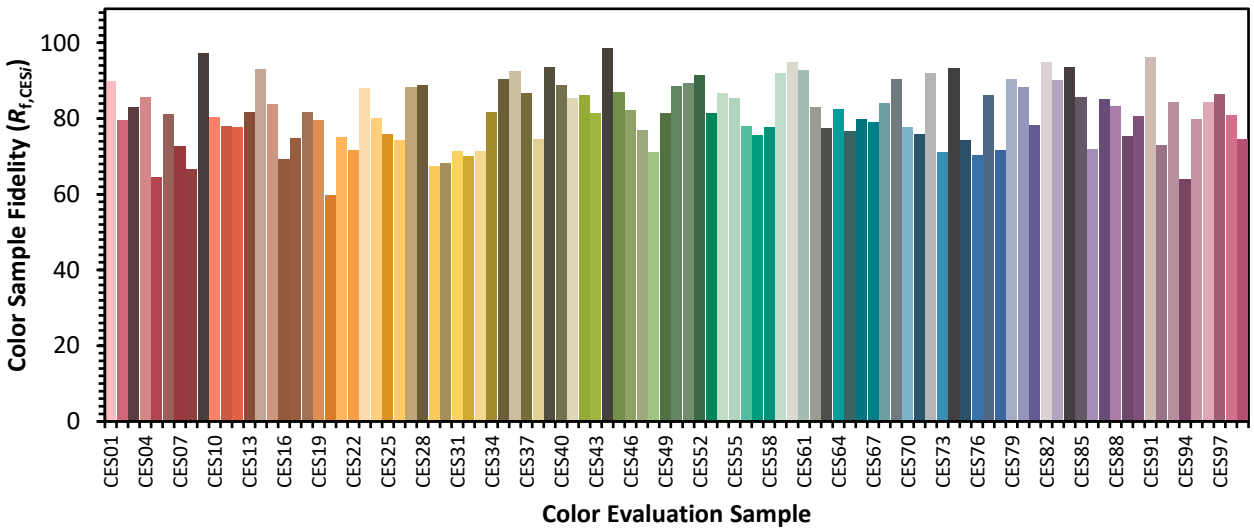
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



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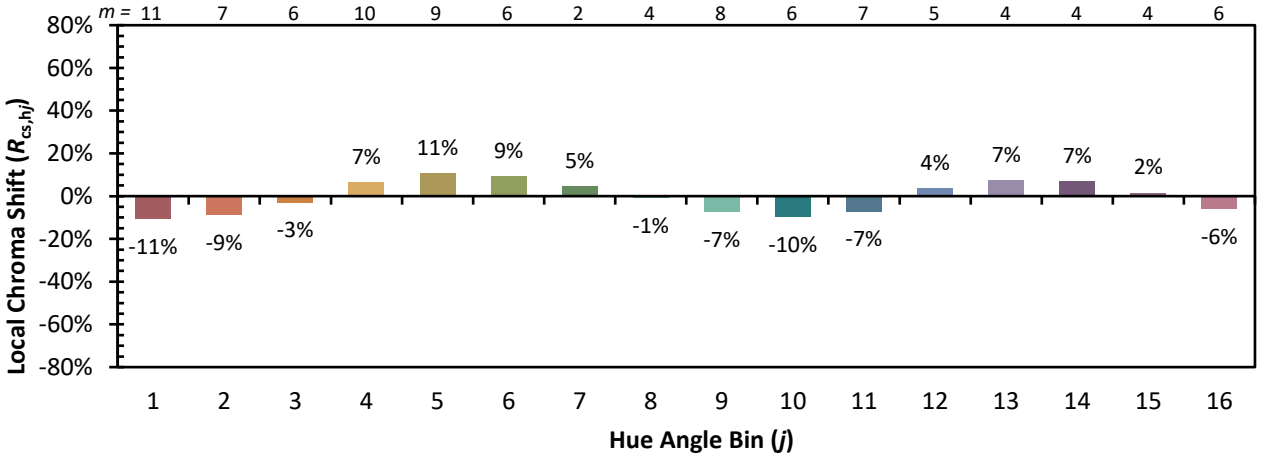
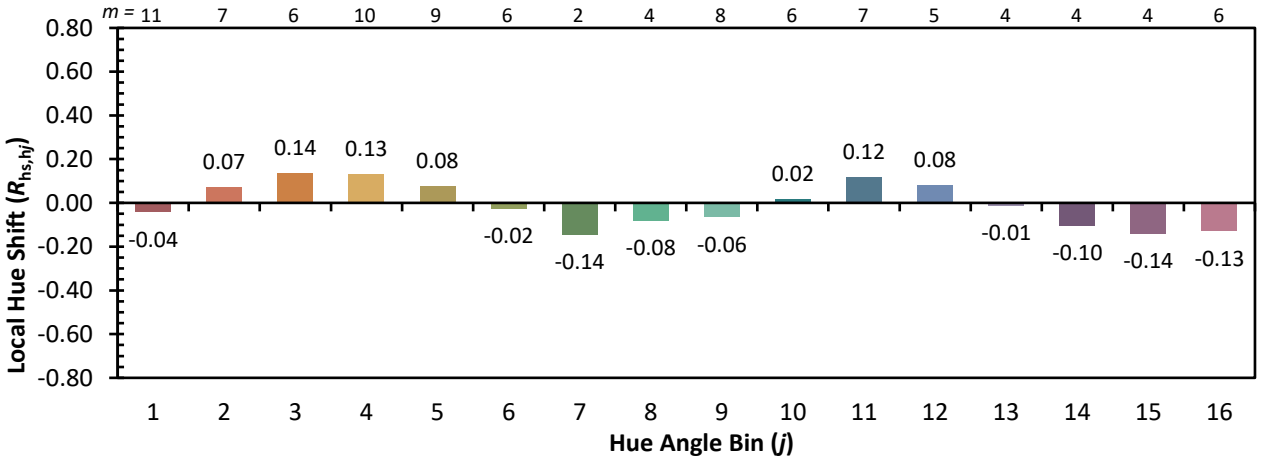
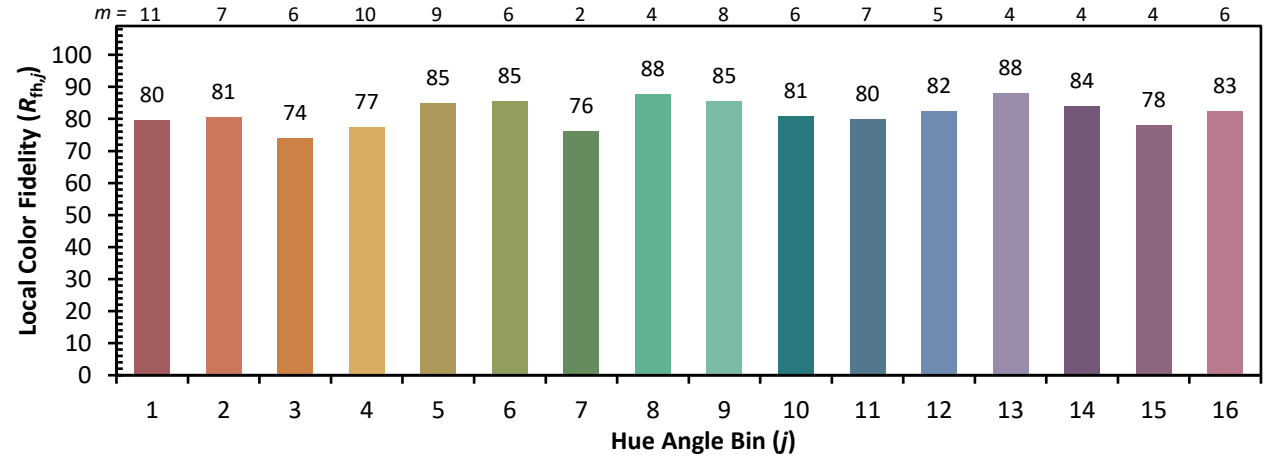
Color Rendition by Hue-Angle Bin







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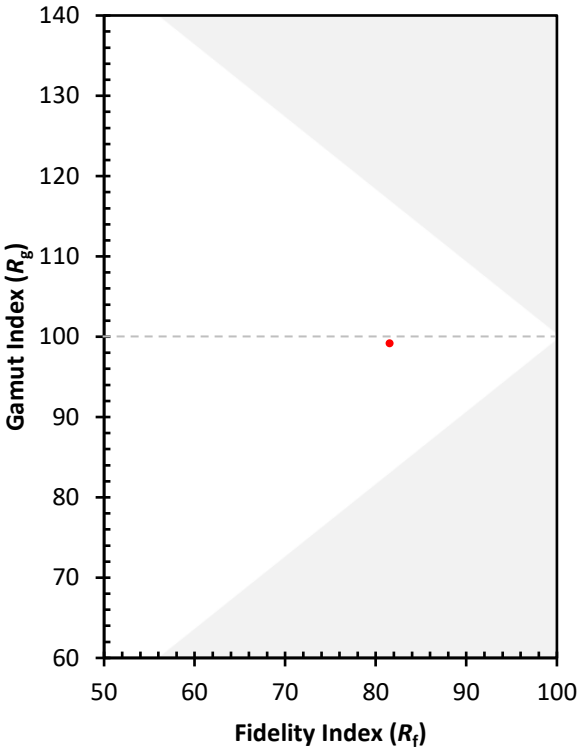
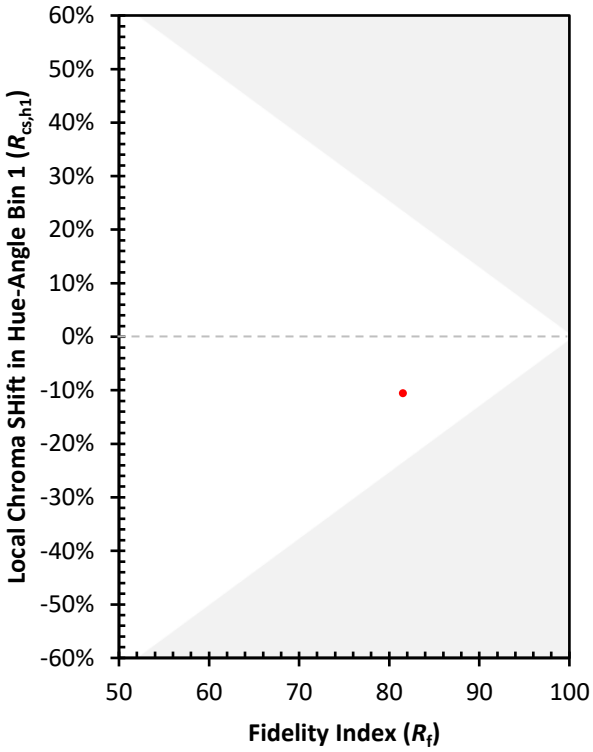
Measure Comparisons





(END OF REPORT)